



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,132	03/23/2004	Masaki Shimizu	119213	2151
25944	7590	07/14/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			KAUFFMAN, BRIAN K	
			ART UNIT	PAPER NUMBER
			3765	

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/806,132

Applicant(s)

SHIMIZU, MASAKI

Examiner

Brian K Kauffman

Art Unit

3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 and 14 is/are allowed.
- 6) ☒ Claim(s) 1 and 3 is/are rejected.
- 7) ☒ Claim(s) 2 and 4-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/10/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 3, 8, and 13 are objected to because of the following informalities: in claim 3, line 3, the word "releases" should be modified to "released". In claim 8, line 6; the word "movement" should be changed to "moving". In claim 13, line 13; the word "movement" should be changed to "moving". In claim 13, line 15; the letter "r" should be deleted. In claim 13, line 18, the space preceding the comma should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell (4,401,045) in view of Kurono et. al. (5,913,276). Russell discloses a sewing machine comprising: a picker capable of holding a needle thread extending from an eye of a sewing needle near the shuttle located below a needle plate (col. 2, lines 33-56); a picker driver driving the picker between a first stop position where the picker is capable of holding the needle thread and a second stop position spaced farther away from the shuttle than the first wherein the second stop position corresponds to a position where the picker is on standby while coming close to the shuttle and having released the needle thread during sewing (col. 3, lines 1-3); wherein the picker is movable to a third position spaced farther away from the shuttle than the second position. Russell's device is capable of utilizing a third position by varying the voltage applied to the solenoid (col. 2, lines 49-56). Russell does not disclose a sewing mechanism including a needle bar, thread take-up lever, or shuttle. However, these three items are vital elements of sewing machines and are disclosed by Kurono. Kurono does disclose a needle bar (21), a thread take-up lever (23), and a shuttle (55). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a needle bar, thread take-up lever, and shuttle in Russell's sewing device because these are all essential elements in a typical sewing machine.

Allowable Subject Matter

Claims 2 and 4-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 13 and 14 are allowed.

The following is an examiner's statement of reasons for allowance: claims 2 and 4 specifically require that the third position correspond to a stop position of the picker in the case of replacement of a bobbin in the shuttle. Claim 5 specifically requires that the shuttle be housed in a cylindrical sewing bed, and that the picker partially protrude outward from the distal end of the bed when at the third stop position. Claims 6 and 7 specifically require a moving check preventing the picker from moving from the first or second stop position to the third stop position. Claims 8, 9, and 10 specifically require that the moving check include a covering member attached to the bed so that the covering member is closed and opened, the covering member in a closed state abuts the picker thereby to prevent the picker from moving to the third stop position, and the member in an open state allows the picker to move to the third stop position. Claims 11 and 12 specifically require that the picker driver motor include a pulse motor capable of driving the picker to the first, second, and third positions.

Claim 13 specifically requires a moving check preventing the picker from moving from the first or second stop position to the third stop position, the moving stop including a covering member attached to the bed so that the covering member is closed and opened, the covering member in a closed state abutting the picker thereby preventing the picker from moving to the third stop position, the covering member in an open state allowing the picker to move to the third stop position, wherein the picker driver includes an actuator capable of driving the picker to the first and second stop positions and a biasing unit biasing the picker in such a direction that the picker abuts

Art Unit: 3765

the covering member, and a biasing force of the biasing unit moves the picker to the third stop position when the covering member is open.

Claim 14 specifically requires a picker control program for use in a sewing machine, the program comprising a picker retreating routine in which the picker retreats from the first or second stop position to the third stop position when the input device is supplied with the command signal.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tajima et. al. (6,352,043). Tajima discloses a device that includes a picker controlled by a driver and control program.

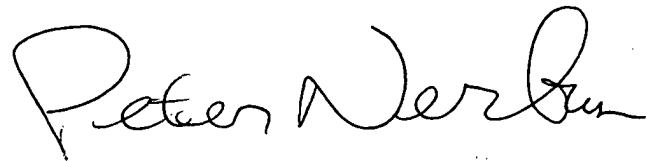
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K Kauffman whose telephone number is (703)605-4933. The examiner can normally be reached on M-F every week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on (703)305-1025. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3765

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BKK



Peter Nerbun
Primary Examiner